# **INSTRUCTION MANUAL**

# Oil Free Compressor and Air Supply System

## Model No.

Rocker 320 / 420 Rocker 440









Please read this instruction manual before using this product.

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## 1. Important Notice

This instrument is designed for laboratory usage only. Please read this manual carefully before installing and operating. The instrument shall not be modified in any way. Any modification will void the warranty and may result in potential hazard. We are not responsible for any injury or damage caused by any non-intended purposes and modifying the instrument without authorization.

- 1. Check the voltage specified on the name plate and ensure it matches the line voltage in your location.
- 2. Install the instrument in a clean, dust-less and ventilated area under 40°C.
- 3. Never use the instrument with any corrosive, chemical, flammable gas or toxic material.
- 4. The filter cartridge is used to absorb moisture and block dust. Please replace the cartridge to maintain pumping efficiency when it becomes dirty or color-changing.
- 5. The instrument is not designed to start against applied pressure. To prevent damage, verify that the outlet is at atmospheric pressure before each start. If necessary, the outlet can be vented to atmosphere by partially unscrewing the regulator knob.
- 6. This instrument has a thermal protection device that automatically shuts-off when it becomes overheated
- 7. The temperature of the compressor surface is very high after use or during work, please don't touch it to avoid being burnt.
- 8. Do not use any lubricant, which may damage the compressor.
- 9. If the supply cord is damaged, please contact the manufacturer or your service agent for replacement to avoid hazard.
- 10. Please discard packing material according to local related regulations.
- 11. Operating condition
  - (a) Ambient temperature: 5~ 40°C
  - (b) Relative humidity: 80% RH Max.
  - (c) Power supply: 100-120V~, 50/60Hz or 200-240V~, 50/60Hz
  - (d) Altitude: up to 2000 m
  - (e) Pollution degree: II
  - (f) Indoor use



Caution: Hot surface

\*Warning: To prevent the instrument shutdown from overheating, please ensure a 20-min break while every 30-min working period.

## 2. Unpacking

Please check if the package is complete without any damage before unpacking. When unpacking, please make sure you have all accessories that indicated on the list. If there is any problem, please keep the serial number along with packing case and contact your local distributor immediately for assistance.

## 3. Main Part Diagram

### (1). Compressor



Position	Designation	Position	Designation
1	Power Switch	4	Filter Cartridge
2	Pressure Gauge	5	Moisture Trap
3	Air Outlet	6	Pressure Regulator (Drain Valve)

<sup>\*</sup> The reference point of pressure gauges is atmospheric pressure.

### (2). Air Supply System





The Rocker 440 system consists of a compressor Rocker 420, air tank (7), pressure regulator (2) and moisture trap (4).

Air is pumped into air tank by Rocker 420, then goes through pressure regulator / moisture trap. After regulating and filtrating, air goes to where you connect.

Stainless steel air tank possesses an auto stop switch (6) which is set to turn on when pressure is lower than 40 psi and off when pressure reaches 60 psi.

Air tank and moisture trap are built in a drain valve (5). Please open the valve to drain the liquid away when it is accumulated in the air tank and moisture trap.

Position	Designation	Position	Designation
1	Power Switch	5	Drain Valve
2	Pressure Regulator	6	Auto Stop Switch
3	Pressure Gauge	7	AirTank
4	Moisture Trap	8	Pressure Regulator of Air Tank

## 4. Operation

#### Operation

#### (1). Oil Free Compressor - Rocker 320 / 420

- A. Press power switch (1) to activate the compressor after making sure all tubing are well connected.
- B. To setup pressure by adjusting the pressure regulator (6).
- C. Check liquid level of moisture trap (5) daily and drain the liquid by drain valve (6).

\*Warning: To prevent the instrument shutdown from overheating, please ensure a 20-min break while every 30-min working period.

#### (2). Air Supply System - Rocker 440

- A. Press power switch (1) to activate the compressor after making sure all tubing are well connected.
- B. To setup pressure by adjusting the pressure regulator (2).
- C. Check liquid level of moisture trap (4) and air tank (7) daily and drain the liquid by drain valve (5).

### 5. Maintenance

- 1. After finishing the experiment, please remove the liquid in the moisture trap and keep pumping the air for at least 2 minutes to withdraw the residual steam.
- 2. The instrument is not autoclavable. Please clean the surface by pure water or 75% ethanol.
- Please replace the cartridge to maintain pumping efficiency when it becomes dirty or color-changing.
- 4. Valve plate(s), O-ring(s) and silicone tube(s) are consumables, it is recommended to replace it on a yearly basis or as needed to ensure good operation.

#### How to replace cartridge

- 1. Please remove the moisture trap by rotating it clockwise.
- 2. Replace the cartridge by the same way.
- 3. Reinstall all components, filter cartridge and moisture trap back.

# 6. Ordering Information

167320-11(22)	Rocker 320, Oil Free Compressor, AC110V, 60Hz (AC220V, 50Hz)
167420-11(22)	Rocker 420, Oil Free Compressor, AC110V, 60Hz (AC220V, 50Hz)
167440-11(22)	Rocker 440, Air Supply System, AC110V, 60Hz (AC220V, 50Hz)
167320-06	Moisture trap/ Pressure regulator for Rocker 320 / 420
167440-06	Moisture trap/ Pressure regulator for Rocker 440
167300-07	Filter cartridge for Rocker 320 / 420
167440-07	Filter cartridge for Rocker 440
167300-42	Muffler (air inlet) for Rocker 320 / 420 / 440
167320-62-2	Rocker 320 repair kit
167420-62-2	Rocker 420 repair kit
167440-62-2	Rocker 440 repair kit
167304-31	Auto Stop Switch, 60~80 psig
167304-32	Auto Stop Switch, 80~100 psig
167200-38	Silicone tube, Ø 6 x 12 mm, 1 m

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